INCH-POUND

MIL-C-11272/15B <u>7 February 2003</u> SUPERSEDING MIL-C-11272/15A (USAF) 7 January 1970

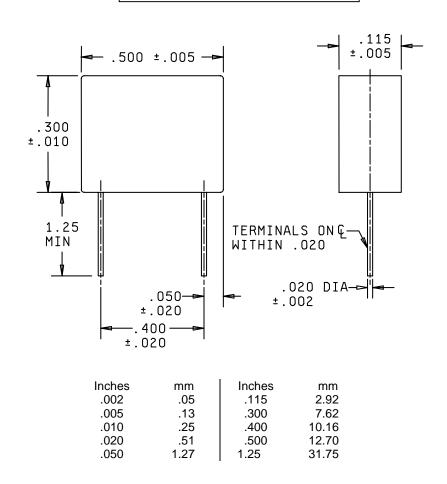
MILITARY SPECIFICATION

CAPACITORS, FIXED, GLASS DIELECTRIC

STYLE CY08

This specification is approved for use by all Departments and Agencies of the Department of Defense.

INACTIVE FOR DESIGN AFTER 7 JAN 1970. USE MIL-PRF-23269.



NOTES:

- 1. Dimensions are in inches.
- 2. Metric equivalents are given for general information only.

FIGURE 1. <u>Capacitors, fixed, glass dielectric, styles CY08</u>.

AMSC N/A 1 of 4 DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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REQUIREMENTS:

Requirements: Requirements shall be in accordance with MIL-C-11272, and as specified herein.

Design and construction: Capacitors shall be of the design, construction, and physical dimensions specified on figure 1 and in table I.

Material:

Dielectric: Glass.

Case: Epoxy.

Lead: Type D2 (gold-plated copper clad iron-nickel alloy) of MIL-STD-1276. Type D5 (Hot solder dip copper clad iron-nickel alloy) of MIL-STD-1276 may be furnished when specified in the contract or purchase order.

Capacitance value: See table I.

Capacitance tolerance: F: 1%, G: 2%, J: 5%.

DC rated voltage: 300 volts.

Dissipation factor: Not to exceed 0.001. PF

Quality factor (Q):

Method 306 of MIL-STD-202.

Test frequency: 1 MHz ±200 kHz.

Not less than 1,000.

Immersion: Method 104 of MIL-STD-202, test condition B.

Dielectric withstanding voltage: No breakdown.

Insulation resistance: Not less than initial requirement.

Capacitance: Change not more than 0.5 percent of nominal value from initial value.

Dissipation factor: Not to exceed 0.001.

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TABLE I. Styles CY08.

Type designation 1/	Capacitance (pF)	DC rated voltage	Capacitance tolerances
	(P.)	renage	available (±)
CY08C112-	1100	300	FGJ
CY08C122-	1200	300	FGJ
CY08C132-	1300	300	FGJ
CY08C152-	1500	300	FGJ
CY08C162-	1600	300	FGJ
CY08C182-	1800	300	FGJ
CY08C202-	2000	300	FGJ
CY08C222-	2200	300	FGJ
CY08C242-	2400	300	FGJ

^{1/} Complete PIN will include an additional letter symbol to indicate capacitance tolerance.

Example: - CY08C112F

Moisture resistance: Method 106 of MIL-STD-202.

At 90 to 95 percent relative humidity.

Insulation resistance: Not less than 1,000 megohms.

At 50 ±5 percent relative humidity.

Dielectric withstanding voltage: No breakdown.

Insulation resistance: Not less than initial requirement.

Capacitance: Change not more than 0.5 percent of nominal value from initial value.

Dissipation factor: Not to exceed 0.001.

Life: 150 percent rated voltage at 125°C +4°C, -0°C for 2,000 hours.

Group A test - 250 hours: group B continuation test for 1,750 hours.

Qualification inspection. Capacitors shall meet the following requirements, as applicable:

For qualification test:

At 25°C:

Insulation resistance: Not less than initial requirement.

Capacitance: Change not more than 0.5 percent of nominal value from initial value.

Dissipation factor: Not to exceed 0.0025.

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At 125°C:

Insulation resistance: Not less than 10,000 megohms.

Capacitance: Change not more than 0.5 percent of nominal value from initial 125°C value.

Dissipation factor: Not to exceed 0.007.

Performance check. Capacitors shall meet the following requirements:

For performance check:

Insulation resistance: Not less than initial requirement.

Capacitance: Change not more than 0.5 percent of nominal or 0.5 pF, whichever is greater, from initial value.

Dissipation factor: Not to exceed 0.0025.

Temperature coefficient and capacitance drift: The temperature coefficient and capacitance drift shall be within the limits specified in table II.

TABLE II. Temperature coefficient and capacitance drift.

Temperature coefficient	Capacitance drift (-55° to +125°C)	
parts/million/°C 140 ±25	0.1 percent or 0.1 pF, whichever is greater.	

VERIFICATION

Sampling and inspection shall be in accordance with MIL-C-11272.

Group A inspection: MIL-C-11272. Successful performance of group A inspection.

Group B inspection: MIL-C-11272: Successful performance of group B inspection.

Qualification: With respect to products requiring qualification, awards will be made only for products which are, at the time of award of contract, qualified for inclusion in the applicable Qualified Products List whether or not such products have actually been so listed by that date. The attention of the contractors is called to these requirements, and manufacturers are urged to arrange to have the products that they propose to offer to the Federal Government tested for qualification in order that they may be eligible to be awarded contracts or orders for the products covered by this specification. Information pertaining to qualification of products may be obtained from Defense Supply Center Columbus, P. O. Box 3990, Columbus OH 43216-5000.

Custodian:

Air Force - 11 Navy - EC

DLA - CC

Review activity: Air Force - 19, 99 Preparing activity: DLA - CC

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